

### **REMARKS**

Claims 2, 4, 5, 7-11, 13, 16-20, 22, 24, 25 and 27-31 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 112**

The Examiner rejected claims 2, 4, 5, 7-11, 13, 16-20, 22, 24, and 25-31 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Specifically, claims 5, 17 and 25 were rejected because it was not clear what the relationship of the operational categories was to the engine load. Furthermore, the Examiner stated claims 5, 17 and 25 contradicted claims 10, 18 and 30, respectively.

Claims 5, 17 and 25 have been amended to clarify that the operational categories include engine load as a parameter. Specifically, claims 5, 17 and 25 now recite adjusting an intake manifold to a first, second and third resonance geometric configurations associated with first, second and third operational categories, in which engine load is at least one of a partial load and a full load. Accordingly, claims 5, 17 and 25 now recite that the operational categories include engine load as a parameter.

Claims 2, 4 and 7-11 depend from claim 5. Accordingly, claims 2, 4 and 7-11 are no longer indefinite. Therefore, reconsideration and withdrawal of the rejection are respectfully traversed.

Regarding claims 13 and 16-20, Applicants note that each ultimately depends from claim 17. Accordingly, claims 13 and 16-20 are no longer indefinite. Therefore,

reconsideration and withdrawal of the rejection are respectfully traversed.

Regarding claims 22, 24 and 27-31, Applicants note that each ultimately depends from claim 25. Accordingly, claims 22, 24 and 27-31 are no longer indefinite. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Additionally, claims 5, 17 and 25 have been amended to more precisely define the invention. Specifically, claims 5, 17 and 25 have been amended to clarify that the controller categorizes engine operation in one of at least a first operational category, a second operational category and a third operational category. Accordingly, claims 5, 17 and 25 no longer contradict claims 10, 18 and 30, respectively. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 4 and 24 have been amended to depend from claim 5 and 25, respectively. Accordingly, they are no longer redundant. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 3, 6, 14, 15, 21, 23 and 26 have been cancelled with out prejudice or disclaimer of the subject matter contained therein. Accordingly, Applicant respectfully submits that the rejection of claims 3, 6, 14, 15, 21, 23, and 26 is moot.

Additionally, the Examiner states that the independent claims are inaccurate because the configuration may not change between partial and full load depending on engine speed. Applicant fails to understand where the independent claims recite a configuration that changes between partial and full load depending on engine speed, and respectfully requests the Examiner to point out with more particularity why these claims are inaccurate.

## **REJECTION UNDER 35 U.S.C. § 102**

Claims 2, 4, 5, 7-11, 13, 16-20, 22, 24, 25 and 27-31 stand rejected under 35 U.S.C. § 102(b) as being anticipated Kimura. (JP 59-126028). This rejection is respectfully traversed.

At the onset, the Applicant notes that claims 5, 17 and 25 have been amended to more precisely define the present invention. More specifically, claims 5, 17 and 25 have been amended to clarify that the controller categorizes at least three operating categories, which are based on at least one of engine load and combination of engine load and engine speed. The controller adjusts the intake manifold to a first resonance geometric configuration when engine load is at a partial load. The controller adjusts the intake manifold to a second resonance geometric configuration when engine load is at a full load. Further, the controller adjusts the intake manifold to a third resonance geometric configuration when the engine load is at a partial and the engine speed is less than a threshold engine speed. Specifically, the control module commands a tuning valve to open when the engine operates in the first and third operational categories. When engine operates in the second operating category, the control module commands the tuning valve to close.

Regarding claims 5 and 25, Kimura fails to show, teach, or suggest a controller that commands a tuning valve to open when the engine load is less than a predetermined value and the engine speed is less than a threshold engine speed. Specifically, Kimura does not show, teach or suggest that the tuning valve is opened when the engine speed is below a predetermined value. Therefore, reconsideration and withdrawal of the rejection is respectively requested.

Regarding claims 2, 4 and 7-11, Applicants note that each ultimately depends from claims 5, which defines over the prior art as discussed in detail above. Therefore, claims 2, 4 and 7-11 also define over the prior art and reconsideration and withdrawal of the rejections are respectfully requested.

With regard to claims 22, 24 and 27-31, Applicants note that each ultimately depends from claim 25, which defines over the prior art as discussed in detail above. Therefore, claims 22, 24 and 27-31 also define over the prior art and reconsideration and withdrawal of the rejections are respectfully requested.

Claim 17 recites adjusting an intake manifold to an open configuration when the engine load is at a partial engine load and when the engine speed is less than a predetermined value.

Regarding claim 17, Kimura fails to show, teach, or suggest adjusting an intake manifold to an open position when the engine load is at a partial load and the engine speed is less than a predetermined value. As discussed above, Kimura fails to show, teach, or suggest adjusting the intake manifold to an open position when the engine speed is lower than a predetermined value. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

With regard to claims 13, 16, and 18-20, Applicants note that each ultimately depends from claim 17, which defines over the prior art as discussed in detail above. Therefore, claims 13, 16, and 18-20 also define over the prior art and reconsideration and withdrawal of the rejections are respectfully requested.

**ALLOWABLE SUBJECT MATTER**

The Examiner states that claims 9, 20 and 29 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph and to include all of the limitations of the base claim and any intervening claims. Applicants presently refrain from rewriting any of claims 9, 20 and 29 in independent for in view of the discussion above.

#### **OTHER CLAIM AMENDMENTS**

Claims 4, 7 and 10 have been amended to depend from allowable claim 5.

Claims 13 has been amended to depend from allowable claim 17.

Claims 24 and 27 have been amended to depend from allowable claim 25.

Claims 7-10, 18-20 and 27-30 have been amended to more clearly specify that engine speed is compared to third predetermined threshold engine speed to select the first and second modes of the controller. Additionally, claims 9, 20 and 29 to provide proper antecedent basis. Claims 9, 20 and 29 have been amended to recite "said engine load", which finds proper antecedent basis in claims 5, 17 and 25.

#### **SPECIFICATION AMENDMENTS**

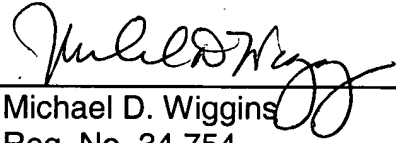
The specification has been amended to correct a typo in paragraph [0036]. The description of the second operational category [0036] is now consistent with the description stated in paragraph [0032]. No new matter has been entered.

## CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (313) 665-4969.

Respectfully submitted,

Dated: 9/23/05

By:   
Michael D. Wiggins  
Reg. No. 34,754

GENERAL MOTORS CORPORATION  
Legal Staff, Mail Code 482-C23-B21  
P.O. Box 300  
Detroit, MI 48265-3000